CLAIMS:

1. An isolated nucleic acid molecule comprising a nucleotide sequence selected from the group consisting of:

(a) the nucleotide sequence of SEQ ID NO: 1;

(b) a nucleotide sequence encoding the amino acid sequence of SEQ ID NO. 2;

(c) a nucleotide sequence encoding a portion of the amino acid sequence of SEQ ID NO: 2 and having at least 20 nucleotides;

(d) a nucleotide sequence having at least 70% identity to the sequence of SEQ ID NO: 1; and

(e) a nucleic acid sequence that is complementary to the nucleic acid sequence of SEQ ID NO: 1;

(f) a nucleic acid sequence that is complementary to a portion of the nucleotide sequence of SEQ ID NO. 1 and having at least 20 nucleotides.

2. The nucleic acid molecule according to claim 1 having at least 80% sequence identity to the nucleotide sequence of SEQ ID NO: 1.

3. The nucleic acid molecule according to claim 1, having at least 90% sequence identity to the nucleotide sequence of SEQ ID NO: 1.

4. An expression vector comprising a nucleic acid molecule of claim 1 and control elements for expression of the nucleic acid molecule in a suitable host cell.

5. A host cell comprising the expression vector of claim 4.

6. A pharmaceutical composition comprising a pharmaceutically acceptable carrier and, as an active ingredient, an expression vector comprising a nucleic acid molecule comprising a nucleotide sequence of SEQ ID. No: 1 and a control element for the expression of said nucleic acid molecule in a host cell within a treated individual.

7. A method for treatment of a disease in an individual, which disease can be ameliorated or cured by raising the level of the vascular endothelial growth factor variant (VEGFV) product, comprising administering to the individual a pharmaceutical composition of claim 6.

8. A pharmaceutical composition comprising a pharmaceutically acceptable carrier and as an active ingredient an expression vector comprising a nucleic acid molecule comprising a nucleotide sequence that is complementary to the sequence of SEQ ID. No: 1 and a control element for expression of said nucleic acid molecule in a host cell of a treated individual.

9. A method for treatment of a disease in an individual, which disease can be ameliorated or cured by decreasing the level of Vascular Endothelial Growth Factor Variant protein, comprising administering to the individual a pharmaceutical composition of claim 8.

10. A method for detecting a Vascular Endothelial Growth Factor Variant nucleic acid sequence in a biological sample, comprising the steps of:

(i) contacting a probe nucleic acid comprising a nucleotide sequence of SEQ ID. NO: 1, or a portion thereof, or a sequence complementary thereto, or a portion of said complementary sequence, with the biological sample and applying conditions such that said probe nucleic acid will hybridize to complementary nucleic acids if present in said sample; and

(ii) detecting a hybridization complex.

11. The method according to claim 10, wherein said biological sample includes mRNA transcripts.

12. The method according to claim 10, where the probe nucleic acid sequence is immobilized.

13. An isolated polypeptide comprising an amino acid sequence selected from the group consisting of:

(a) the amino acid sequence of SEQ ID NO: 2;

(b) a portion of the amino acid sequence of SEQ ID NO: 2 and having at least ten amino acids; and

(c) an amino acid sequence that is a modified sequence of SEQ ID NO: 2 in which one or more of the amino acid residues of SEQ ID NO: 2 has been added, deleted, replaced or chemically modified such that a polypeptide having said modified sequence has substantially the same biological activity as a polypeptide having the amino acid sequence of SEQ ID NO: 2.

14. An isolated nucleic acid molecule consisting essentially of a sequence selected from the group consisting of:

(a) the nucleotide sequence of SEQ ID NO: 1;

(b) a nucleotide sequence encoding the amino acid sequence of SEQ ID NO. 2;

(c) a nucleotide sequence encoding a portion of the amino acid sequence of SEQ ID NO: 2 and having at least 20 nucleotides;

(d) a nucleotide sequence having at least 70% identity to the sequence of SEQ ID NO: 1; and

(e) a nucleic acid sequence that is complementary to the nucleic acid sequence of SEQ ID NO: 1;

(f) a nucleic acid sequence that is complementary to a portion of the nucleotide sequence of SEQ ID NO. 1 and having at least 20 nucleotides.

15. An isolated nucleic acid molecule that encodes an amino acid sequence that is at least 80% identical to SEQ ID NO: 2.

16. The isolated nucleic acid molecule according to claim 15 that encodes an amino acid sequence that is at least 90% identical to SEQ ID NO: 2.

17. A purified antibody that binds specifically to a polypeptide comprising the amino acid sequence of SEQ ID NO: 2.

18. An expression vector comprising an isolated nucleic acid molecule of claim 14 that comprises a nucleotide sequence encoding the amino acid sequence of SEQ ID No: 2 or a nucleotide sequence that is complementary to a nucleic acid sequence encoding the amino acid sequence of SEQ ID No: 2; and control elements for expression of the nucleic acid molecule in a suitable host cell.

19. A host cell comprising the expression vector of claim 18.

20. A pharmaceutical composition comprising a pharmaceutically acceptable carrier and, as an active ingredient, an agent selected from the group consisting of:

(a) an expression vector comprising a nucleic acid molecule coding for the amino acid sequence of SEQ ID NO: 2 and a control element for the expression of said nucleic acid molecule in a host cell within a treated individual;

(b) a polypeptide comprising the amino acid sequence of SEQ ID NO: 2;

(c) a polypeptide comprising a portion of the amino acid sequence of SEQ ID NO: 2 having at least ten amino acids; and

(d) a polypeptide comprising an amino acid sequence that is a modified sequence of SEQ ID NO: 2 in which one or more of the amino acid residues of SEQ ID NO: 2 has been added, deleted, replaced or chemically modified such that said modified sequence has substantially the same biological activity as a polypeptide having the amino acid sequence of SEQ ID NO: 2.

21. A method for treatment of a disease in an individual, which disease can be ameliorated or cured by raising the level of a Vascular Endothelial Growth Factor Variant protein, comprising administering to the individual a pharmaceutical composition of claim 20.

22. A pharmaceutical composition comprising a pharmaceutically acceptable carrier and as an active ingredient an agent being one of:

(a) an expression vector comprising a nucleic acid molecule comprising a nucleotide sequence that is complementary to a nucleotide sequence encoding the amino acid

sequence of SEQ ID NO: 2 and a control element for expression of said nucleic acid molecule in a host cell of a treated individual; or

(b) an antibody that binds specifically to a polypeptide comprising an amino acid sequence of SEQ ID NO: 2.

23. A method for treatment of a disease in an individual, which disease can be ameliorated or cured by decreasing the level of a Vascular Endothelial Growth Factor Variant protein, comprising administering to the individual a pharmaceutical composition of claim 22.

24. A method for detecting a Vascular Endothelial Growth Factor Variant nucleic acid sequence in a biological sample, comprising:

(a) contacting a probe nucleic acid comprising a nucleotide sequence encoding the amino acid sequence of SEQ ID NO: 2 or a sequence complementary thereto with the biological sample and applying conditions such that said probe nucleic acid will hybridize to complementary nucleic acids if present in said sample; and

(b) detecting a hybridization complex.

25. A method according to claim 24, wherein said biological sample comprises mRNA transcripts.

26. A method according to claim 24, wherein the probe nucleic acid is immobilized.

27. A method for identifying a candidate compound that specifically binds to a Vascular Endothelial Growth Factor Variant protein and modulates the activity of a Vascular Endothelial Growth Factor Variant protein comprising:

(a) providing a polypeptide comprising an amino acid sequence of SEQ ID NO: 2;

(b) contacting the candidate compound with said polypeptide;

(c) determining the effect the candidate compound on the biological activity of said polypeptide and selecting as a candidate a compound that affects said biological activity.

28. A method according to claim 45, wherein the compound is an activator and the measured effect is an increase in the biological activity.

29. A method according to claim 45, wherein the compound is an inhibitor and the effect is a decrease in the biological activity.

30. A method for detecting a Vascular Endothelial Growth Factor Variant protein in a biological sample, comprising:

(a) contacting an antibody that specifically binds to an epitope presented by a polypeptide comprising the amino acid sequence of SEQ ID NO: 2 with the biological sample and applying conditions permitting the formation of an antibody-antigen complex; and

(b) detecting an antibody-antigen complex.

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